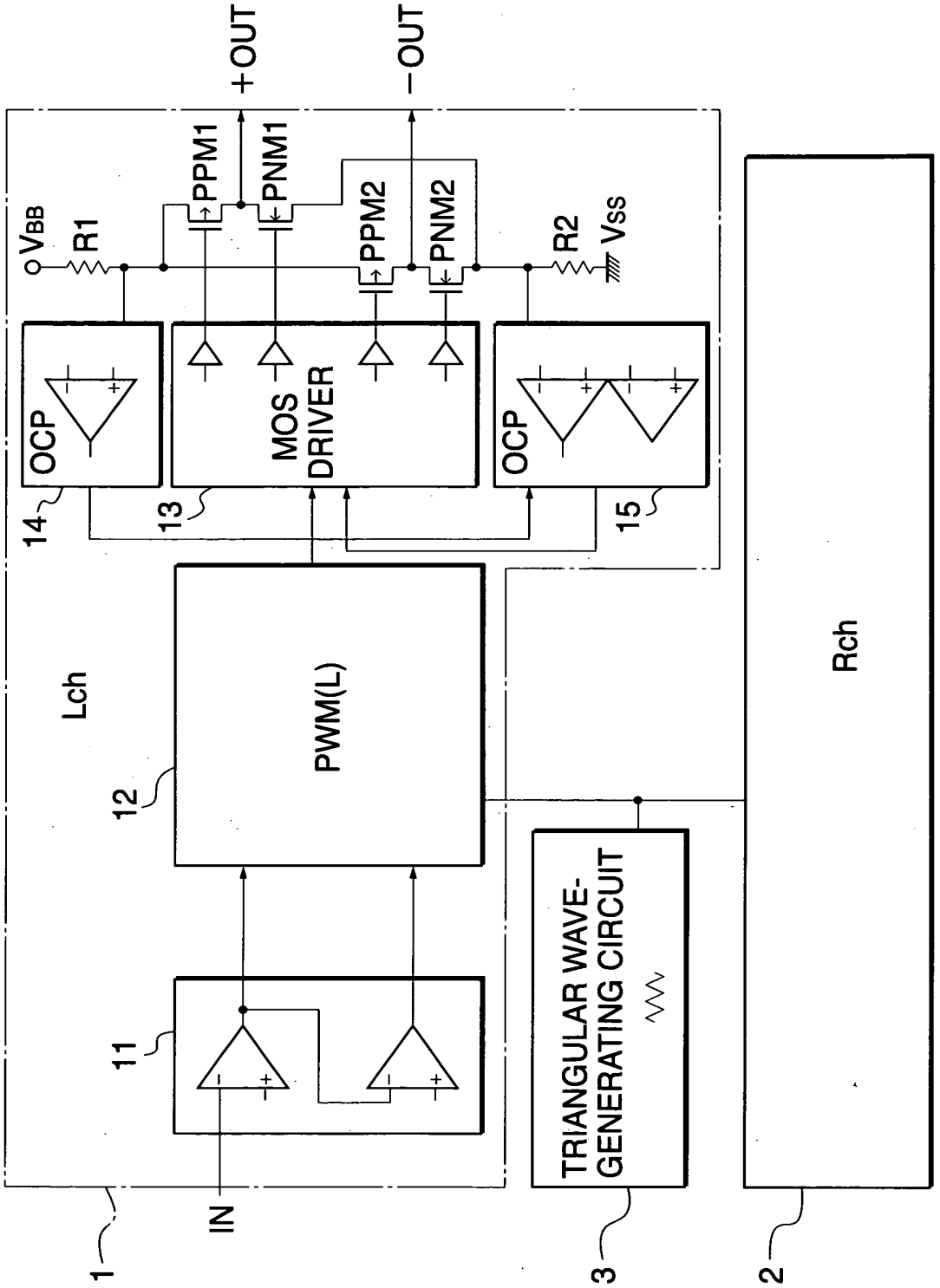
FIG. 1


+OUT
−OUT
PPM1
PNM1
PPM2
PNM2
VBB
R1
R2
Vss
OCP
MOS DRIVER
OCP
14
13
15
Lch
PWM(L)
12
Rch
11
TRIANGULAR WAVE-GENERATING CIRCUIT
IN
1
3
2

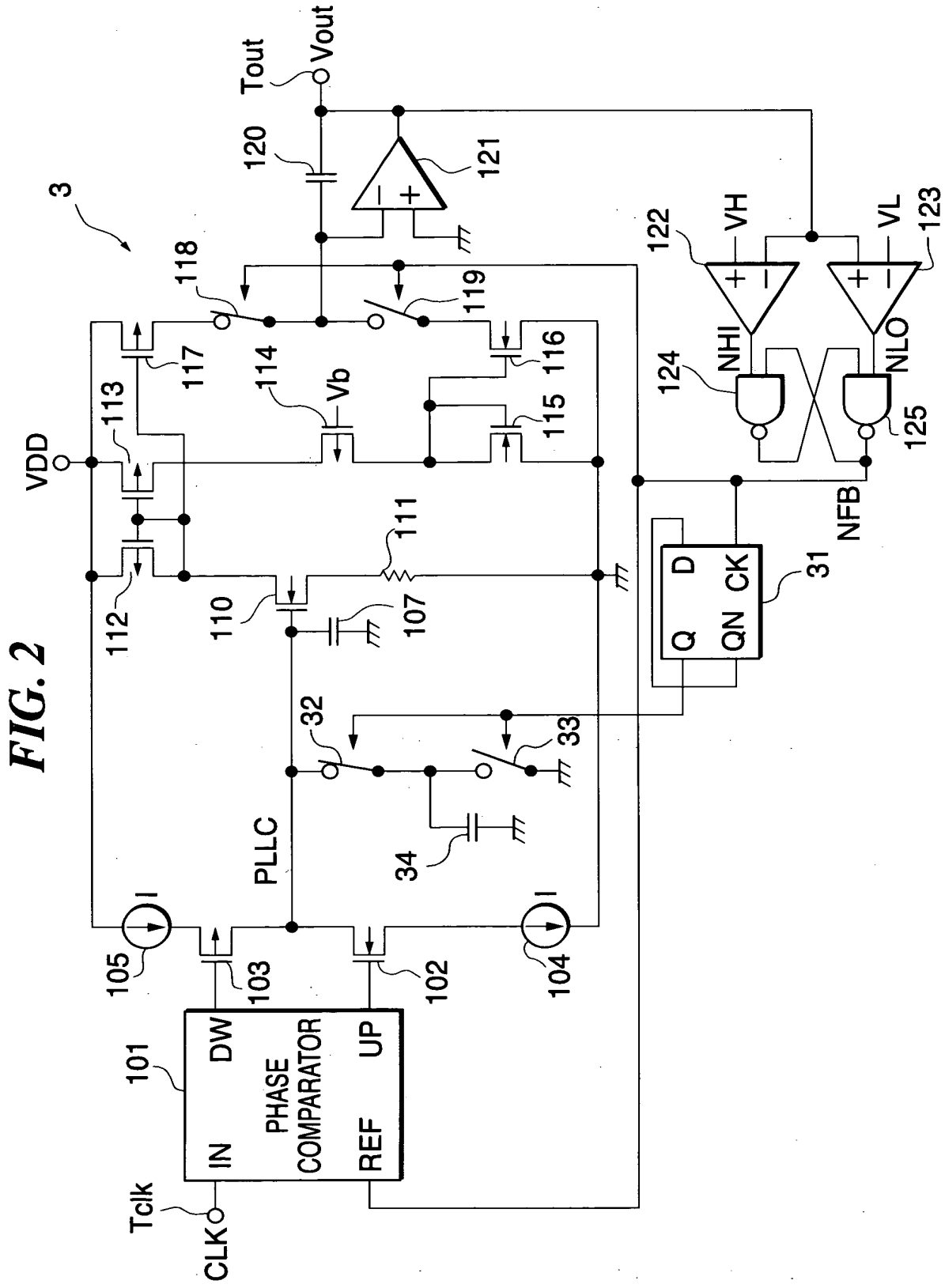

3
Tout
Vout
120
121
118
119
122
VH
VL
123
NHI
NLO
124
125
117
114
Vb
116
115
113
VDD
111
112
110
107
NFB
D
CK
Q
QN
31
32
33
34
PLLC
I
105
103
102
104
101
DW
UP
PHASE COMPARATOR
IN
REF
Tclk
CLK

FIG. 2

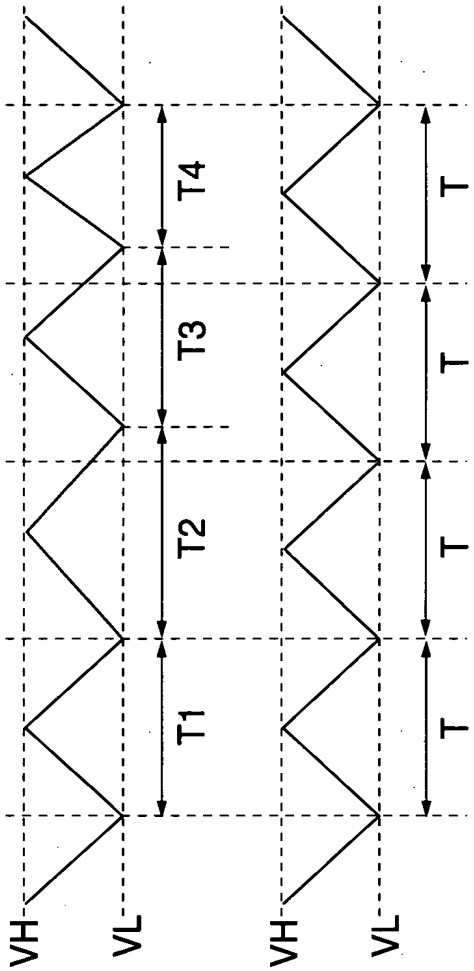


FIG. 3A

FIG. 3B

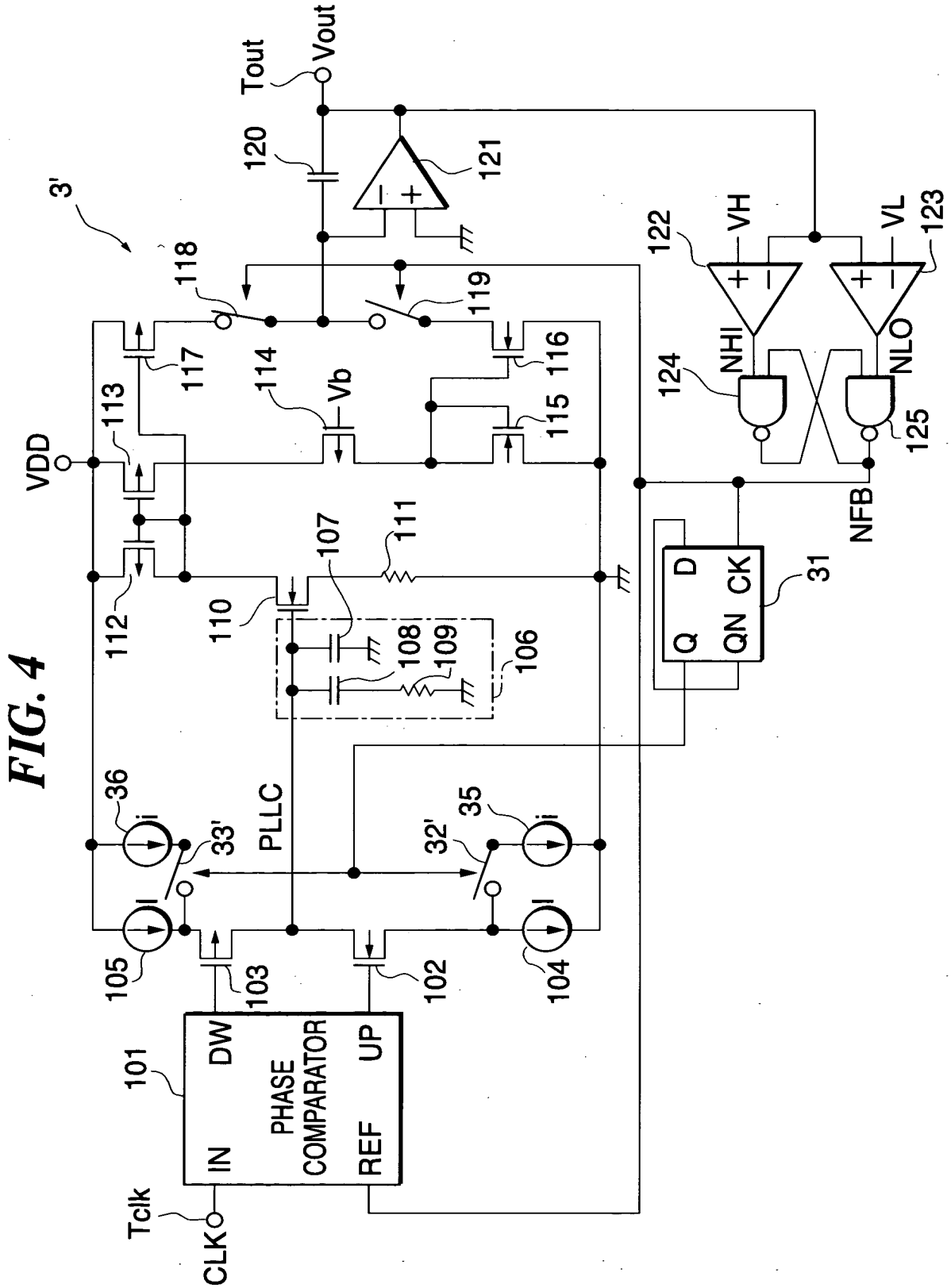
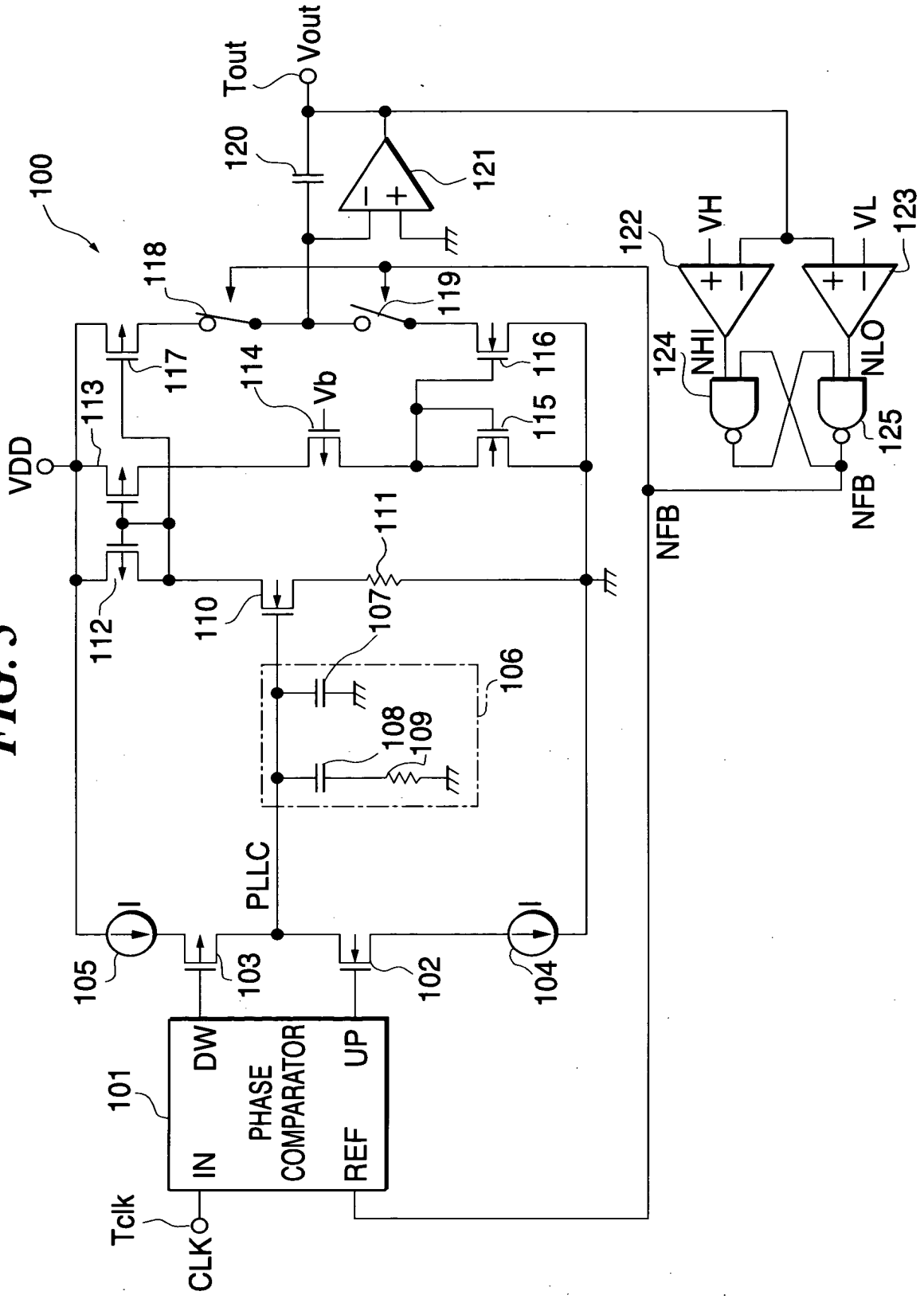

3'
Tout
Vout
120
121
118
119
122
VH
VL
123
NHI
NLO
124
125
117
114
Vb
116
115
113
VDD
NFB
107
111
112
110
108
109
106
D
CK
Q
QN
31
36
35
33'
32'
PLLC
105
104
103
102
101
DW
UP
PHASE COMPARATOR
IN
REF
Tclk
CLK

FIG. 4

FIG. 5


100
Tout
Vout
120
121
118
119
122
VH
VL
123
124
NHI
NLO
125
NFB
113
117
114
Vb
116
115
VDD
111
112
110
107
106
108
109
PLLC
105
103
102
104
101
DW
PHASE COMPARATOR
UP
IN
REF
Tclk
CLK

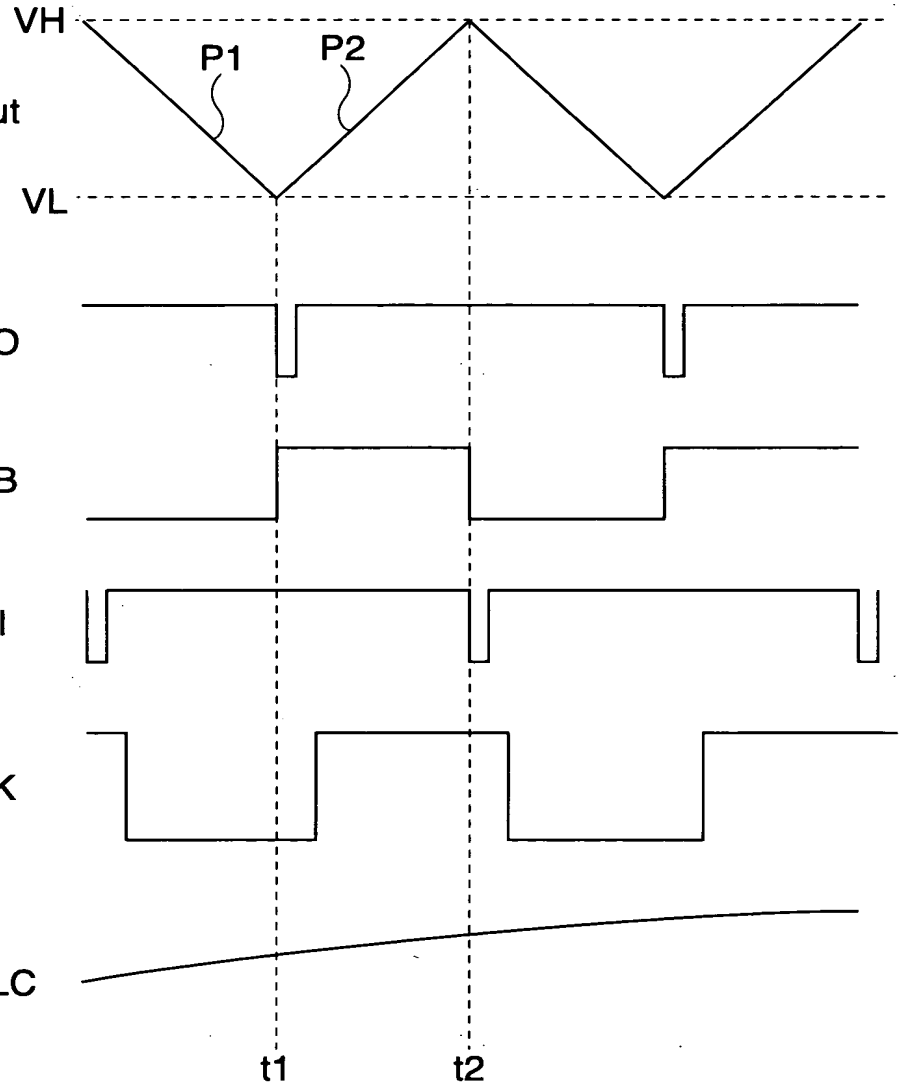


FIG. 6A Vout

FIG. 6B NLO

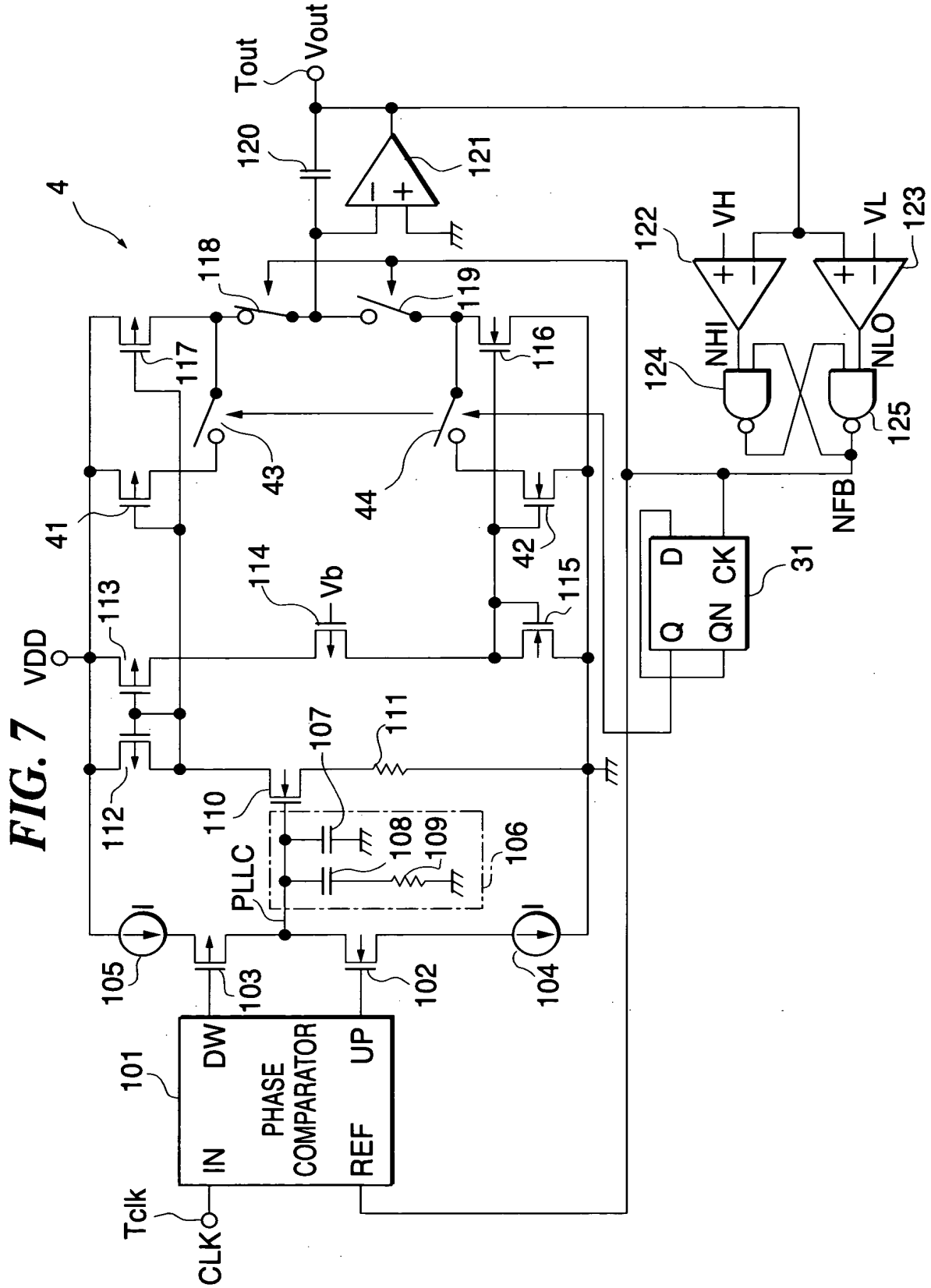
FIG. 6C NFB

FIG. 6D NHI

FIG. 6E CLK

FIG. 6F PLLC

FIG. 7


4
Tout
Vout
120
121
118
119
117
116
43
44
41
42
114
Vb
113
115
VDD
112
110
107
111
PLLC
108
109
106
105
104
103
102
101
DW
PHASE COMPARATOR
UP
IN
REF
Tclk
CLK
122
VH
VL
123
NHI
NLO
124
125
NFB
D
CK
Q
QN
31

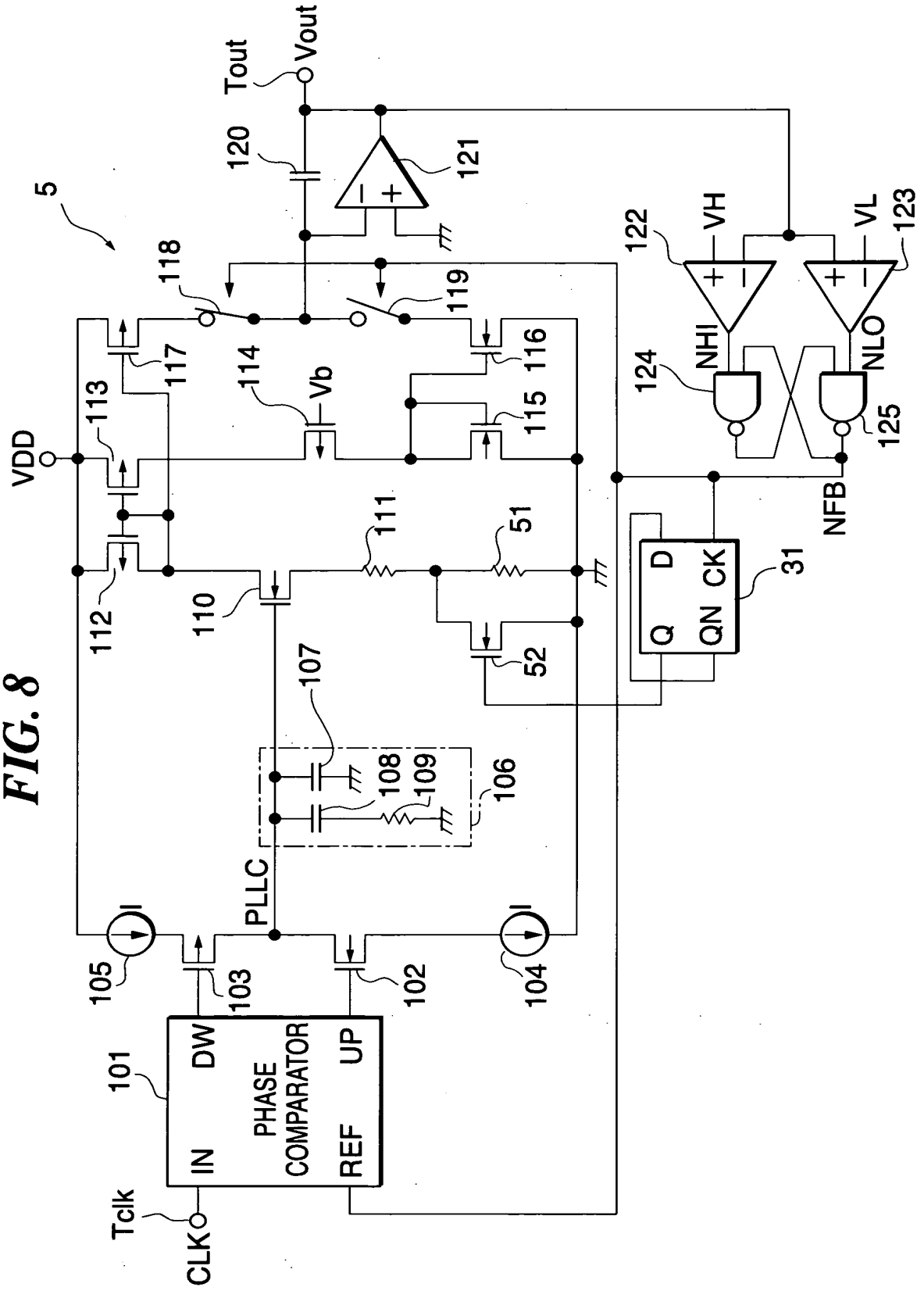

5
Tout
Vout
120
121
118
119
122
VH
VL
123
NHI
NLO
124
125
117
114
Vb
116
115
113
VDD
111
51
112
110
107
52
D
CK
Q
QN
31
NFB
108
109
106
PLLC
105
103
102
104
101
DW
UP
PHASE COMPARATOR
IN
REF
Tclk
CLK

FIG. 8